

REMARKS

Claims 13-16 currently appear in this application. The Office Action of March 4, 2004, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Rejections under 35 U.S.C. 112

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

Claim 14 has been amended to correct the self-evident typographical errors and to delete tetracyanoquinodimethane and diimmonium salts from the list of metal complexes.

Claim Objection

Claim 14 is objected to under 37 CFR 1.75 (c) as being of improper dependent form for failing to further limit the subject matter of a previous claim.

This rejection is respectfully traversed. In accordance with the Examiner's helpful suggestion, claim 13 has been amended to recite tetracyanoquinodimethane and diimonium salts.

Art Rejections

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagaki et al. in view of Sato et al.

This rejection is respectfully traversed. It should be noted that Formula (1) recited in claim 13 defines asymmetric cyanine dyes wherein R_1 is not equal to R_2 . In contrast thereto, Inagaki et al. only disclose symmetric cyanine dyes, wherein $R_1=R_2$.

As shown in Table 2 on page 30 of the instant specification, asymmetric cyanine dyes reveal more than three times higher solubility in TFP, which is a representative organic solvent commonly used for preparing optical recording media, as compared with symmetric cyanine dyes, such as those of Chemical Formulae 17 to 20. Because of this much higher solubility in organic solvents, the cyanine dyes of Formula (1) can contribute to improving the working efficiency in producing optical recording media. This is described in more detail in the specification as filed in the paragraph bridging pages 34 and 35. This higher solubility of the asymmetric

cyanine dyes of the present invention improves the working efficiency of sequential dissolution of light absorbents in organic solvents and coating of the substrates with these solutions so formed.

It is respectfully submitted that it would have been difficult to expect higher solubility of asymmetric cyanine dyes from the disclosure of Inagaki et al., because Inagaki et al. only discloses symmetric cyanine dyes. Sato adds nothing to Inagaki et al. because the compounds disclosed in Sato have no substituent corresponding to "R₃" in formula (1).

Therefore, one skilled in the art would not expect from the disclosure of Sato that improved stability and/or improved solubility are obtained when R₁ is made different from R₂ in the cyanine dyes of formula (1) because Sato does not disclose the cyanine dyes having a substituent corresponding to "R₃" in formula (1).

The compounds of Sato further different from the compounds of Inagaki in that the compounds of Sato have no substituent corresponding to "Y" in the compounds of Inagaki. Therefore, one skilled in the art would not be motivated to combine the disclosures of Inagaki et al. and Sato to obtain the compounds claimed herein.

As the Federal Circuit stated in *In re Lee*, 61 USPQ2d 1430 (January 18, 2002, Fed. Cir.), "As applied to the

determination of patentability *vel non*, when the issue is obviousness, 'it is fundamental that rejections under 35 U.S.C. 103 must be based on evidence comprehended by the language of that section.' *In re Grasselli*, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000)... . When patentability turns on the question of obviousness, the search for an analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., *McGinley v. Franklin Sports, Inc*, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) ('the central question is whether there is a reason to combine [the] references,' a question of fact drawing on the *Graham* factors."

'The factual inquiry whether to combine references must be thorough and searching.' *Id.* This precedent has been reinforced in myriad decisions, and cannot be dispensed with, See, e.g., *Brown & Williamson Tobacco Corp. v. Philip Morris, Inc.*, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000). ('a showing of a suggestion, teaching, or motivation to combine the prior art references is an "essential component of an obviousness holding"'') (quoting *C. R. Bard, Inc. v. M3 Systems, Inc.* 48 USPQ2d (Fed. Cir. 1998)) The Court went on to quote *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999), "Our case law makes clear that the best defense against the subtle but

powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."

There is a requirement for specificity in combining references, *See, In re Kotzab*, 55 USPQ2d 13134, 1317 (Fed. Cir. 2002) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.").

In the present case, the Examiner has shown no motivation to combine Sato with Inagaki et al. to arrive at the particular invention claimed herein.

Claims 13-16 are rejected as being unpatentable over Morishima et al. in view of Inagaki et al. and/or Sato et al. '089 combined with Sato et al. '839.

This rejection is respectfully traversed. As with the Inagaki et al. disclosure, the compounds B-16 of Morishima et al. is symmetric rather than asymmetric and differs from the Sato'839 compounds, which are asymmetric ones. One skilled in the art would not estimate properties of asymmetric cyanine dyes based on the properties of symmetric cyanine dyes.

Moreover, none of Morishima et al., Inagaki et al. '281, Sato '089 and Sato'839 disclose the cyanine dyes as

defined in formula (1). There is no motivation given to combine any of these references to arrive at the compounds claimed herein.

The Examiner states in the middle of page 6 of the Office Action that it would have been obvious to modify the dyes B-25 and B-26 of Morishima et al. using the PF_6^- anion as the counter ion taught by Inagaki et al. and/or Sato '089 with a reasonable expectation of improving the stability of the resultant medium with respect to heat and light. However, it should be noted once again that none of the cited prior art discloses the asymmetric cyanine dyes represented by formula (1). The Examiner's reasoning is not drawn from empirical evidence in the cited patents.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morishima et al. in view of Inagaki et al. and/or Sato et al. '089 combined with Sato et al. '839, further in view of Suzuki et al., Ootaguro et al., or Yanagisawa et al. This rejection is respectfully traversed.

None of Suzuki, Ootaguro et al. and Yanagisawa et al. teaches that the stabilizer disclosed in them also acts as a stabilizer for the specific cyanine dyes disclosed in Inagaki et al., Sato'839, Sato'089, and Morishima. Furthermore, as stated above, none of Inagaki et al., Sato'839, Sato'089, or Morishima et al. discloses the

asymmetric cyanine dyes represented by formula (1) of the present application.

The Examiner has provided no reason to expect that the stabilizers disclosed in Suzuki, Ootaguro and Yanagisawa can act as a stabilizer for the asymmetric cyanine dyes represented by formula (1) of the present application in the amounts used in Suzuki, Ootaguro and Yanagisawa.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagaki et al. in view of Sato et al.'839, further in view of Hamer and Dickerson et al. This rejection is respectfully traversed.

Compound 201 of Hamer et al. has a Y substituent which differs from the Z substituent of the compounds of formula (1), as well as an R substituent which differs from the R' of the compounds of the present invention. Contrary to this, the asymmetric cyanine dyes of the present invention recite that Y is the same as Z ("Y" and "Z" in formula (1) are both "C"). Thus, it is respectfully submitted that Hamer et al. do not disclose or suggest the asymmetric cyanine dyes as claimed herein.

Dickerson et al. add nothing to Hamer et al., because Dickerson et al. is silent with respect to optical recording media and disclose nothing about the asymmetric

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cyanine dyes represented by formula (1) of the present invention.

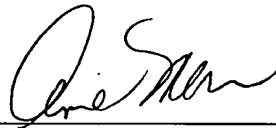
The prior art made of record and not relied upon is merely considered to be pertinent to applicant's disclosure.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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